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DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Y1. NATIONAL PARK

FILE COPY

FILE No. 143

MONTHLY REPORT

FOR

APRIL, 1924.

APRIL, 1924

May 5, 1924

Dear Sir:

The following is my report on conditions in Yellowstone National Park and on the operation of the park for the month of April, 1924:

I. GENERAL CONDITIONS

Weather conditions throughout the month have been moderate. Light precipitation, mild winds and normal temperatures have generally prevailed and snow depths have materially diminished at all points. There is no snow at Old Faithful, Sylvan Pass and Mammoth except the remnants of drifts that are more or less sheltered by the timber. All park roads beyond Mammoth are still closed to travel except that the Cooke City mail stage continues its regular weekly schedule. The road from Mammoth to Golden Gate is now being cleared of drifts and it is considered that a wagon and team will go through from Mammoth to Norris on the 6th and will proceed from thence to Madison Junction and West Yellowstone in two successive days. The road from the Upper Basin to West Yellowstone is practically bare most of the way and a car went through from the Basin to the West Entrance on the 29th. The approach to the East Entrance is practically free from snow and a car went through to within a mile of the Sylvan Pass Ranger Station on the 30th. Snow depths on the road between Canyon and Norris vary from 20 to 40 inches and between Lake and Canyon the variance is from 7 to 27 inches, but should the present weather conditions continue it is thought that most of the park roads will be passable within the next twenty days.

Weather

The following records are quoted from the report for April of the Observer in charge of the local United States Weather Bureau at Mammoth Hot Springs, Park Headquarters:

The month as a whole was somewhat colder than normal, with much unsettled and cloudy weather, but unusually light snowfall.

Temperature: Monthly mean, 35.6° , is 1.4° below normal, yet the warmest April for the past five years. Temperature was moderately low on several days, but no unusual extremes occurred. The highest was 60° on the 22nd and the lowest was 9° on the 16th.

Precipitation: Total, 0.95 inch, is 0.43 inch below normal, and the least amount for April during the past 15 years. Light rain or snow occurred almost daily during the second decade of the month.

Snowfall: Total 2.9 inches; normal 8.2 inches. Only four times in the past 38 years has so small amount of snow fallen in April. In April of last year, 14.1 inches of snow occurred.

Wind: Average hourly velocity 9.0 miles; normal 8.0 miles. The maximum velocity was 30 miles per hour from the south on the 14th.

Sunshine: Percentage of possible 47; 20-year normal 57.

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Snow Depths: Rangers on stations report the following snow depths at the close of the month. Snow depths of April 30, 1923, are also given for purposes of comparison:

	<u>1923</u> <u>Inches</u>	<u>1924</u> <u>Inches</u>
Bechler River	40	35
Soda Butte		30
Lake	29	19
Sylvan Pass	10	Drifts
Snake River	37	30
Riverside	18	12
Gallatin	27	20

Canyon	35	20
Old Faithful	30	Drifts
Mammoth	0	Trace

Travel

Travel during the past month has consisted mostly of local visitors, traveling salesmen and solicitors, to Mammoth Hot Springs, and is indicated by the Chief Ranger's Monthly Travel Report hereto attached.

II. PERSONNEL

On April 1st there were 66 employees on the payrolls and on April 30th there were 68. The following list shows the number of appointees of various classes serving during the month, with a general statement of the kind of work in which they were engaged:

<u>No.</u>	<u>Class</u>	<u>Kind of work Performed</u>
1	Superintendent	General administration and supervision of all activities in the park.
1	Asst. Superintendent	Administration, purchasing, disbursing.
2	Asst. Engineers	1 in charge of engineering work; 1 assisting
6	Clerks	1 Financial Clerk; 1 Cost Accounting Clerk; 1 Personnel and File Clerk; 1 Clerk on orders, proposals and vouchers, also handling time and payroll work; 2 stenographer typists on stenographic work for Superintendent.
3	Electricians	Operated power plant regular shift, including Sundays, read meters, did necessary line work.
3	Foremen	1 in charge of headquarters corral and freighting work about headquarters; one on road work; one

in shops working on sprinklers.

1	Telegrapher	Sent and received all Government Western Union messages, operated one shift on telephone switchboard.
2	Telephone Switchboard Operators	One operated telephone switchboard daily shift, including Sunday; one W.A.E. operator.
1	Master Mechanic	In charge of shops and of repair to heavy road machinery.
2	Blacksmiths	General blacksmith work, including shoeing of horses in shop, overhauling and repairing tools and equipment.
1	Machinist	Repairing equipment
1	Master Painter	General shop work, including painting equipment and buildings
1	Master Plumber	In charge of general plumbing and water and sewer systems.
1	Auto Mechanic	On duty in power plant
1	Carpenter	Repairing buildings at headquarters.
5	Laborers	Teaming, freighting, assisting mechanics and miscellaneous work at headquarters.
1	Steward and Master of Transportation	In charge of all transportation and of storehouse.
1	Chief Buffalo Keeper	In charge of tame buffalo herd.
2	Asst. Buffalo Keepers	One in charge of hay ranch operations at Slough Creek (ret'd to duty from L.W.O.P. Apr. 13); 1 assisting.
1	Buffalo Herder	Assisting Buffalo Keeper
1	Park Naturalist	Scientific research work and developing museum.

1	Chief Park Ranger	In charge of ranger force.
1	First Asst. Chief	In charge of Northern District.
1	Asst. Chief Park Ranger	On duty at Lake district.
20	Park Rangers (14 WAE)	Patrolling, protection of game, miscellaneous duties.
7	Temporary Park Rangers	Patrolling, miscellaneous duties.

Leaves of Absence

Joseph Joffe, Clerk, April 1-8, 7 days
 William Wiggins, Master Plumber, April 1 (noon), 1/2 day.
 Birt Vink, Blacksmith, April 7-12, 6 days.
 Albert Collins, Electrician, April 7-30, 21 days
 William Wiggins, Master Plumber, April 8-12, 5 days
 August C. Neumann, Master Painter, April 10 (noon)-11, 1-1/2 days.
 Andrew R. Edwin, Clerk, April 10 (noon), 1/2 day.
 Anna E. Madsen, Clerk, April 4-5, 2 days.
 John Bauman, Park Ranger, Park Ranger, April 3-14, 10 days.
 Harlie Hodgins, Park Ranger, April 15-26, 11 days.
 Julia S. Stockett, Clerk, April 20-30, 2 days.
 Lucy Bilkert, Clerk, April 10 (noon), 1/2 day.
 Andrew R. Edwin, Clerk, April 18 (noon), 1/2 day.
 Peter E. Bilkert, Clerk, April 18 (noon), 1/2 day.
 Anna E. Madsen, Clerk, April 17 (noon), 1/2 day.
 Julia S. Stockett, Clerk, April 17 (noon), 1/2 day.
 Jacob H. Cornick, Buffalo Herder, April 18-26, 8 days.
 Julius L. Groer, Park Ranger, April 21-30 (noon), 8 1/2 days.
 Anna E. Madsen, Clerk, April 11-26, 6 days.
 William Wiggins, Master Plumber, April 24-25 (noon), 1-1/2 days.
 William L. Bicket, Carpenter, April 1 (noon), 1/2 day.
 William L. Bicket, Carpenter, April 4-5, 2 days.
 Lucy Bilkert, Clerk, April 24 (noon), 1/2 day.
 James H. Dupuis, Park Ranger, April 23-26, 4 days.
 Andrew R. Edwin, Clerk, April 23, 1 day.
~~Ray C. Brown, Park Ranger, April 21-30, 10 days.~~
 Edmund J. Sawyer, Park Naturalist, April 22, 1 day.
 W. J. O'Loughlin, Laborer, April 19, 1 day.
 Fred C. Finch, Park Ranger, April 22, 30, 8 days.
 Leroy Hill, Asst. Supt., April 2-4, 3 days.

Sick Leave

Alfred C. D. Herman, Laborer, April 18-23, 5 days.
Daniel W. Tripp, Laborer, April 14-19, 6 days.
Roy C. Brown, Park Ranger, April 21-30, 10 days

Leave Without Pay

Julia S. Stockett, Clerk, April 1-4, inclusive.
Warren Hutchings, Asst. Buffalo Keeper, April 1-13, 13 days.

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In addition to the regular employees listed above under appointment, the following were employed temporarily by the day:

	<u>April 1st</u>	<u>April 30th</u>
Skilled Laborers	10	10
Painters		2
Blacksmiths	2	2
Cook	2	3
Truck Driver	1	1
Axe-man	5	5
Flunkay	1	1
Laborers	10	10
2-Horse Teamsters	6	6
	<u>37</u>	<u>40</u>
Appointees	<u>66</u>	<u>68</u>
Total	103	108

III. WORK COMPLETED

(b) Repair and Maintenance of Physical Improvements

During the entire month Engineer Barney has directed the work of the crew stationed on the East road and the following shows the extent of the work done:

Elk Fork: Repairs to the bridge over Elk Fork and construction of a log crib there have been completed and the crew moved to another job. To make the bridge level it was necessary to raise one corner twenty-five inches and another seven inches. New concrete was placed on top of the abutment

to make it level. A new concrete wing-wall, 13 feet high and 20 feet long, was extended out from the abutment on the upstream side. The east approach to the bridge was filled, which required 532 cubic yards of material. A log crib was constructed to extend from the new wing-wall of the bridge upstream. This crib is 320 feet long, 8 feet high and 9 feet wide inside. After placing a willow brush mat on the sides and bottom, the crib was filled with quarried rock. As an added precaution against being washed out, brush was piled along the shore side of the crib and covered with rock.

The construction of this crib, together with the substantial and permanent nature of the improvements to the bridge abutment will prevent any further washouts at the place as occurred in the past, causing delay to travel and considerable expense to the government.

Hanging Rock: A new crib was constructed about one-quarter of a mile above Hanging Rock to replace one destroyed by the flood last summer. It is 60 feet long, 6 feet wide and 9 feet high inside and was filled with 120 cubic yards of rock.

Clearwater Creek: Repairs were made to both concrete abutments of this bridge which were undermined last summer. The cavities were cleaned of silt and debris, then excavated to solid bottom and filled with concrete. Considerable work has been done above the bridge, straightening out the channel. A new channel was excavated for a distance of 250 feet and two log cribs constructed to divert and retain the stream in the new channel. The lower crib is 95 feet long, 7 feet high and 10 feet wide, and the upper one is 68 feet long, 7 feet high and 9 feet wide. These cribs have been finished but not yet filled with rock. About 10 days more will be required to complete the work at this place.

Gunbarrel Creek: On April 25th a crew began work preliminary to the construction of the new concrete bridge over Gunbarrel Creek. The stream was diverted to an old channel over which a temporary bridge was constructed. Excavation was started for the abutment footings.

Gardiner Canyon: Foreman Knochs with several men removed four large boulders from the Gardiner River bed at the cliffs, which obstructed the natural flow of water.

The trunks of several large trees were also removed.

Tower Falls Road: On the 29th an attempt to take a car over the Tower Falls road to inspect snow conditions resulted in its reaching the nine-mile post. At that point it was deemed advisable to stop because of the softness of the road. However, another trip was made on May 5th and the roads were found to be in splendid condition as far as the thirteen mile post (the "Cut"), with the exception of two or three places which were still soft. Some shoveling will have to be done at this point to enable teams and cars to pass. The balance of the road is in good condition and will permit of traffic.

Golden Gate Road: This road is in much better condition than the Tower Falls road. There is a short drift in the Gate which can be removed in a half day, and which will allow the passage of trucks.

(c) Miscellaneous Improvement Work:

Office Work: Through the assistance of First Assistant Chief Ranger Trischman in gathering data while on a recent trip to Upper Geyser Basin, a trail map of that district was compiled by the engineers' office. This department also wrote orders for standard building materials for the season's work.

IV. WORK IN PROGRESS

(a) Construction of Physical Improvements

Yellowstone Park Hotel Company:

The work of enlarging sections of the Mammoth Hotel is still in progress. The girls' dormitory is being enlarged to accommodate more employees.

Yellowstone Park Transportation Company:

A new wing is being built on the drivers' bunkhouse at Mammoth.

Yellowstone Park Camps Company:

The following work has been done at the Camps: Construction of 75 new guest cabins commenced in March has been carried almost to completion. A new horse barn and

corral for saddle horses entirely completed. Extensive repairs to 125 old guest cabins, consisting of new floors, windows, repair and repainting of furniture, residence completed for winter keeper, main kitchen remodeled, dormitory building commenced for J. B. Haynes to replace old government building formerly used by Haynes and now taken over by the Camps Company.

(c) Miscellaneous Improvement Work:

The Master Painter continued his work in the hospital and at the beginning of the month it was two-thirds completed. Four trucks were painted; glass repaired at Museum and Canteen; and miscellaneous repair work done to several quarters.

The Master Mechanic and his helpers overhauled three trucks and one Ford car. Parts were made for sprinkler attachments.

The Blacksmiths mounted one sprinkler tank and did more than the usual amount of horseshoeing. One wagon was completely overhauled and new shovels, picks, axes, were equipped with new handles.

The Carpenter worked in the hospital and devoted some time to miscellaneous work on quarters.

The Master Plumber and his assistants overhauled the heating plant in the hospital building and did general repair work to water and sewer system at Mammoth.

The Steward and Master of Transportation worked in the storehouse, issuing supplies, building and painting shelves, making out orders for equipment and repairing the balance of tools. Freighting of coal, lumber and supplies from Gardiner to Mammoth continued.

The Foreman of the Grounds and Stables, and helpers, repaired equipment, sawed wood, hauled garbage, coal and ice, and cleaned the grounds about headquarters.

The Telephone System and Power Plant were operated in the usual manner. The Power Plant was run constantly with the results shown in comparison for April, 1923, as follows:

	<u>1923</u>	<u>1924</u>
Total KWH generated, in KWH	28,359	39,490
Of this, sold to public utilities at 5¢ per KWH	2,878	3,089
Consumed for street lighting	929	1,129
Balance, consumed in Government buildings, for power and lighting, lost on lines in transit	24,552	35,272
Peak load during month in KWH	62	84
Generated April 1924	39,490	
" " 1923	28,359	
Sold, April 1924	3,089	
Sold, " 1923	2,878	

The Telephone and Switchboard Office was open daily from 7:30 A.M. to 8:45 P.M. The total business handled was as follows:

Switchboard Calls

On Government local lines	2417	
On Hotel Company lines	290	
Long Distance Connections	154	
Total	2861	

Telegrams

Government Sent	75	
Commercial Sent	28	103
Government Received	45	
Commercial Received	35	80

Office Force

The office force was busy with usual routine work, which includes orders, payment of vouchers, preparation of accounts, reports, general correspondence, etc. 1228 pieces of official mail were received and 1140 were sent out dur-

ing the month.

Ranger Patrols and Activities

Chief Ranger Woodring has been busy throughout the month directing the routine work of the department and other duties incidental to the approaching season. He made a trip down the Yellowstone valley on the 11th and 12th and inspected and purchased a total of seven saddle horses to meet the season's requirements. He had the government horses brought in from Slough Creek Ranch on the 11th. They were all carefully inspected and groomed, and a few, including the horses recently acquired, were branded.

His other work for the month has consisted of repairs to halters, bridles, saddles, pack outfits and other articles of horse equipment and frequent patrols in the Mammoth district - the antelope range in particular. His recommendations and suggestions in connection with ranger appointments were submitted early in the month and all correspondence incidental thereto has gone promptly forward and this work is now well in hand. All successful applicants for ranger appointments have been notified and practically all the men have submitted their orders for uniforms and equipment. All unsuccessful applicants have been notified that we can offer them nothing this season.

First Assistant Chief Ranger Trischman returned on the 13th from a special patrol to Upper Geyser Basin, West Yellowstone and Gallatin. Travel conditions were exceedingly difficult as the snow at that time was badly honeycombed and snow depths were at their maximum at most points covered by the patrol. The general conditions were good at all points and a limited amount of game was seen, including 21 deer at Upper Basin, approximately 200 elk between Upper Basin and Fountain, and abundant moose signs on all streams between Upper Basin and Gallatin. Five moose were seen on the Grayling and about 40 elk. Mr. Trischman returned via Sportsmans Lake and thence down Mulheron Creek to Electric. Moose signs were seen all along the way and he estimates that there are 9 moose in the Sportsmans Lake district. He has since made a tour of inspection of the Northern District, calling at all points in the district and returning to Mammoth on the 30th. Conditions are good throughout the district and his report on the game will be noted under the proper headings.

Assistant Chief Ranger Douglas returned to Lake Station from a patrol of the Southern District on the 15th and reports excellent conditions at all points. He has since patrolled

from Lake to Mammoth for the purpose of reporting snow depths at all points along the highway.

Rangers at all stations have made their regular patrols throughout the month despite the difficult travel conditions which have generally prevailed, and the usual work of policing and spring cleaning is being done with promptness and enthusiasm.

The construction of a new checking station at West Yellowstone will be started about May 10th and this work will be mostly performed by members of the ranger force who can be spared from other duties while the work is in progress.

VII. POLICIES

There were no changes in policy during the month.

VIII. COST OF OPERATION

The cost of operating the park for the month of April, 1924, will be shown in the monthly Cost Accounting Report which will go forward as soon as prepared.

IX. OTHER MATTERS OF INTEREST

Wild Animals

Game Conditions: Game and forage conditions are very good. The hardships occasioned by the storm during the last week of March were of brief duration and the game had weathered the worst of it, with small losses, by the end of the first week of April. The game losses during the month have been very slight; forage is increasingly plentiful as the snow recedes, uncovering abundant feed on the higher slopes. The game is moving leisurely back to the higher levels as the snow line recedes. Fresh grasses are appearing on all the lower elevations and the same is being grazed to a limited extent. The losses commonly occasioned by green forage and the ravages of the ticks have been very slight thus far and the general condition of all game is very good.

Elk: Reports from ranger patrols during the month indicate the presence of scattered bands of elk at many parts throughout the park. The small bands that have been wintering in the warm basins near Morris, Fountain, Upper Basin and at other sheltered points in the interior have weathered the winter in good shape. Numerous small bands have recently moved up to the higher ranges, 7000 foot level - but there does not appear to be a very rapid movement in this direction thus far. The main body of the Gallatin Herd, numbering 3000, has not moved up from the game preserve east of the park. Trischman reports 2600 along the slopes between the Buffalo Farm and Hellroaring. The usual bands are frequenting Sepulcher, Mt. Sverts and Blacktail. Chief Ranger Woodring counted 400 near the target range on the 16th and Trischman recently counted 264 on Cottonwood. Bauman reports 500 in the Tower Falls district and Dupuis reports 1500 between the Lamar River Canyon and Soda Butte Cabin.

The total losses for the season to date (winter kills and buffalo kills) are 60. Pursuant to authority from the Director two cows, 3 year olds, were shipped on April 2nd to General Harry C. Trexler, Allentown, Pennsylvania.

It will be noted that fully a third of our elk losses for the season have been occasioned by buffalo. The losses from natural causes, winter kills, have been very moderate.

Antelope: Ranger H. C. Brown, who has been stationed at Hoppe's ranch, 4 miles below Gardiner, during the winter season for the purpose of riding the antelope range beyond the park limits, was recalled to Mammoth on April 18th as the antelope had all moved back within the park boundaries. Chief Ranger Woodring made an antelope patrol on the 21st and counted a total of 236 in the Mammoth-Gardiner District, and further counts totalling 80 have been made on patrols from Blacktail to the Buffalo Ranch via Hellroaring. The total losses reported for the season are 5 so it will be seen that recent counts plus losses bring the total to 321, which lacks only 4 of equaling our total count early in the season. The herd is in splendid condition in all respects except that the males outnumber the females at the ratio of about 3 to 1.

Deer: The deer have wintered splendidly. Their losses have been moderate and their present condition is good despite the ravages of the woodtick. They are particularly numerous in the Gardiner-Mammoth district and along

the Yellowstone from Gardiner to Hellroaring. A recent count of 113 was submitted by Park Naturalist Sawyer along the old road from Mammoth to Ice Lake, a distance not exceeding two miles, and Trischman reports a total of 110 on his recent patrol from Crevice to Hellroaring. He also counted 21 at the Upper Geyser Basin earlier in the month. The deer are so widely scattered that no effort has been made to obtain a full count, but recent counts have been submitted which will be of interest and are submitted as follows:

Mammoth to Gardiner	183
Crevice to Hellroaring	110
Upper Geyser Basin	<u>21</u>
Total	314

The total losses to date are as follows:

Coyote kills	21
Winter kills	7
Kills resulting from injuries	<u>4</u>
Total	32

The coyote kills occurred along the Yellowstone and were reported from Crevice, Hellroaring, Cottonwood and the Buffalo Park. All kills resulting from injuries were reported from the Mammoth district, the most noteworthy being the lone white-tail buck which had attached itself to the tame herd at Mammoth. He came to an untimely end by falling in a ditch near Mammoth Camp, resulting in a broken neck.

Mountain Sheep: Our best report for the season in relation to mountain sheep was submitted for the month of February. The total at that time was 217, which exceeded the total counts prior to March, 1923, by 76. However, the total for April, 1923, was 248, which exceeds our total count thus far this season by 31. It is possible that subsequent counts will exceed the total of the February report but this is hardly probable as the sheep have never at any time this season come down to the lower levels as freely as they did during the winter of 1922 and 1923, and now that the snow is receding the opportunities for improving the count are not good. A loss of only one has been thus far reported and this was apparently a winter kill. The various bands have wintered well and are in good condition.

Buffalo, Wild Herd: The report for the month of March covers the situation on wild buffalo to date. No further counts have been had although the band heretofore reported on Cache Creek has been seen on two occasions during the past month. The buffalo were observed from a considerable distance on both occasions and their numbers were estimated at about 14. It is hoped that further reports can be had on this herd during the month of May. The totals thus far are as follows:

Observed by Douglas on the Pelican Creek slope	4
Observed by Dupuis on the Lamar slope	12
	<hr/>
	16

Buffalo, Tame Herd: The feeding of buffalo was discontinued on April 21st and a total of 35 tons of hay was fed during the month. The general condition of the herd is excellent. Ten calves have arrived to date. About 50 tons of hay were on hand at the Buffalo Ranch when buffalo feeding was discontinued, and the feeding incident to the spring work at the ranch will considerably reduce this amount. The work of dragging the meadow was begun on the 30th. There is 210 tons of hay on hand at Slough Creek.

Moose: All reports regarding moose are very favorable. Trischman reports abundant signs on all streams from the Upper Basin to Gallatin. He counted two at Upper Basin and five on Grayling Creek. Signs were numerous at Sportsman's Lake and reports from the North and South districts are equally assuring. The maximum count for the season was 121. They are widely distributed and splendidly conditioned.

Bear: Rangers Hodgins and Dunrud report the first bear of the season at Park Point on the 6th. Two bears appeared at Lake Station on the 9th and one appeared at Canyon on the 12th. Bear signs have since been seen at a number of other points. Ranger Ogston reports the first Silver Tip for the season at Soda Butte Station on the 14th.

Small Game: Small game is now quite commonly seen. Beaver are actively at work at all their favorite haunts and woodchucks are plentiful everywhere.

Predatory Animals: The total coyote kills for the month was 12 and they were all from the Lamar River district. The season total to March 31st was 209, making a grand total

of 221 for the period October 1st to April 30th, and it is interesting to note that the total kills for the season ending April 30th, 1923 is the same as above. However, the report of the preceding season accounted for 8 wolves, whereas no wolves or mountain lions have been accounted for during the season just closed. Signs of both have been exceedingly scarce and there has been no report of game losses from either source during the entire season.

School

The school report for the month of April is attached hereto.

Sickness and Medical Attention

Dr. J. M. Wolfe, National Park Service physician, reports 15 resident calls and 55 office calls during the month.

Post Office

Mail was received at, and dispatched from, the Post Office daily except Sundays, on the same schedule as adopted March 15th when the daily train service was modified, namely, to connect with trains at Gardiner on Mondays, Wednesdays and Fridays; and with auto stage at the same point on Tuesdays, Thursdays, and Saturdays. There was some disposition shown on the part of the Railway Mail Service to curtail our mail service to three times a week, sending it only on train days; but this was discouraged most emphatically by patrons of the office on the ground that our office was serving about 275 patrons on April 1st and the number was increasing daily, and that such action was likely to result in serious complaints.

Religious Services

Services were held in the Lodge Room of the Canteen by Rev. Wm. Friend Day on the evening of April 6th; and by Rev. Geo. C. Kechler on two Thursday evenings, namely, April 3rd and 24th.

Special Easter services were held in the Chapel on Eastern morning, April 20th, by the Rt. Rev. H. E. H. Fox, Suffragan Bishop of the Episcopal Church in Montana, assisted by Rev. Wm. Friend Day. This service, which was well attended, included a baptismal service, and a communion service.

Circulars

Attached hereto is Circular No. 1, dated April 10th, regarding the promotion of Peter M. Bilkert from Financial Clerk to Assistant Superintendent.

IX. RECEIPTS AND REMITTANCES

Postal Money Order #55045, dated April 9, 1924, drawn
by the Postmaster of Yellowstone Park,
on the Postmaster at Washington, D. C. \$ 2.65

Cordially yours,

Leroy Hill,
Acting Superintendent.

The Director,
National Park Service,
Department of the Interior,
Washington, D. C.

JSC

DEPARTMENT OF THE INTERIOR.

1924

[illegible]

Total automobile campers in public camping grounds

Total visitors Cave Falls—Bechler River Region

SEASON TOTAL TO DATE

Book 1

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
YELLOWSTONE NATIONAL PARK
YELLOWSTONE PARK, WYO.

OFFICE OF THE SUPERINTENDENT

April 10, 1924.

CIRCULAR NO. 1.

Effective at once, Mr. Peter E. Bilkert is appointed an assistant superintendent and will have charge of property, equipment, transportation, the cost accounts, inventories, etc. in addition to his present work, and he will also act as assistant to Mr. Albright in his capacity as Field Assistant to the Director.

The new appropriation for Yellowstone National Park amounts to \$372,900, which is only \$4,800 more than we had this year and it will be necessary that the utmost economy be exercised by each department head during the next year.

The new road bill, which grants \$490,000 to be spent during the period of the next three years to Yellowstone National Park, has been passed. This money can be used only in road improvement.

When Superintendent Albright returns, he and I will announce other changes in the interest of economy and efficiency.

LEWIS HILL
Acting Superintendent

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

MONTHLY METEOROLOGICAL SUMMARY.

tion, YELLOWSTONE PARK, WYO. ; month, A P R I L , 1924. , 19 .

TEMPERATURE. (Degrees Fahrenheit.)			Precipitation. (In inches and hundredths.)	Character of day.	Sunshine, percent- age.	ATMOSPHERIC PRESSURE. (Reduced to sea level; inches and hundredths.)	
Max.	Min.	Mean.				Mean	lowest
40	18	29	0	PtClay	64	Mean 29.98	highest 30.57, date 6
42	28	35	T	PtClay	50	lowest 29.50	date 14
41	26	34	.12	Cloudy	12	TEMPERATURE.	
35	24	30	.05	Cloudy	46	Highest 60	date 22; lowest 9, date 16
48	20	34	0	PtClay	65	Greatest daily range 35	date 30
52	30	41	0	PtClay	77	Least daily range 9	date 15
56	30	43	0	PtClay	71	Mean for this month in	
41	24	32	T	PtClay	70	1871 80 89 43 98 40 07 34 16 38	
46	20	33	0	PtClay	72	1872 81 90 39 99 35 08 39 17 31	
39	29	34	.12	Cloudy	0	1873 82 91 41 00 42 09 31 18 33	
46	31	38	.03	Cloudy	29	1874 83 92 32 01 36 10 43 19 39	
48	31	40	0	Cloudy	28	1875 84 93 31 02 37 11 34 20 31	
55	38	46	.25	Cloudy	31	1876 85 94 38 03 37 12 36 21 35	
44	27	36	.31	Cloudy	0	1877 86 95 -- 04 39 13 38 22 33	
27	18	22	T	Cloudy	33	1878 87 39 96 34 05 37 14 38 23 35	
33	9	21	T	PtClay	57	1879 88 43 97 38 06 38 15 45 24 36	
34	23	28	.03	Cloudy	24	Normal for this month 37.0	
44	27	36	T	Cloudy	26	Absolute maximum for this month for 37 years 77	
44	24	34	.02	PtClay	72	Absolute minimum for this month for 38 years -3	
47	31	39	T	PtClay	56	Average daily excess (+) or deficiency (-) of this month as compared with the normal -1.4	
55	33	44	0	Clear	96	Accumulated excess (+) or deficiency (-) since January 1 -25	
60	41	50	0	PtClay	69	Average daily excess (+) or deficiency (-) since January 1 -0.2	
53	40	46	0	Cloudy	8	PRECIPITATION.	
40	21	30	T	Cloudy	14	Total this month 0.95; snowfall 2.9	
39	18	28	0	PtClay	74	Greatest precipitation in 24 hours 0.26, date 13-14	
45	19	32	0	PtClay	72	Snow on the ground at end of month 0	
46	21	34	0	Cloudy	31	Total precipitation this month in	
45	29	37	T	Cloudy	5	1871 80 89 0.92 98 0.95 07 1.12 16 1.05	
49	26	38	.02	PtClay	55	1872 81 90 1.39 99 2.30 08 0.88 17 2.64	
59	24	42	0	Clear	99	1873 82 91 0.18 00 1.93 09 0.81 18 1.59	
45.1	26.0	35.6	.95		47	1874 83 92 0.92 01 1.08 10 1.19 19 1.41	
						1875 84 93 0.97 02 2.14 11 1.40 20 1.33	
						1876 85 94 1.87 03 0.80 12 2.24 21 1.70	
						1877 86 95 0.61 04 0.96 13 1.21 22 1.15	
						1878 87 1.40 96 1.29 05 1.52 14 1.49 23 1.81	
						1879 88 ---- 97 1.21 06 1.24 15 1.22 24 0.95	
						Normal for this month 1.38	
						Excess (+) or deficiency (-) of this month as compared with the normal -0.43	
						Accumulated excess (+) or deficiency (-) since January 1 -3.92	
						MEAN RELATIVE HUMIDITY (Percentage).	
						6 a. m., 73; Noon p. m., 48; 6 p. m., 48	
						WIND.	
						Prevailing direction NW; total movement 6501 miles;	
						average hourly velocity 9.0; maximum velocity (for five minutes) 30 miles per hour, from south	
						on 14	
						WEATHER.	
						Number of days, clear 2; partly cloudy 14; cloudy 14;	
						on which .01 inch, or more, of precipitation occurred 9	
						MISCELLANEOUS PHENOMENA (dates of).	
						Auroras 0; halos: solar 0, lunar 0	
						Hail 0; sleet 0; fog 0	
						Thunderstorms 0	
						*Frost: light ---; heavy ---; killing ---	

NOTE.—"T" indicates trace of precipitation.

autumn frosts are not recorded after the occurrence of "killing," except in Florida and along the immediate coast of the Gulf of Mexico.

E. H. Fletcher, Observer.

Weather Bureau.